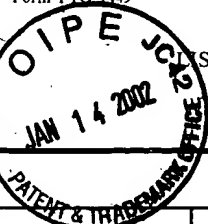


Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
30-5004(4015)SERIAL NO.
09/465,492LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Segal et al.FILING DATE
December 16, 1999GROUP
1742

U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
HW	AA 5,850,755	12/98	Segal	—	—	
NW	AB 5,456,815	10/95	Fukuyo et al.	—	—	
NW	AC 5,826,456	10/98	Kawazoe et al.	—	—	
NW	AD 5,413,650	05/95	Jarrett et al.	—	—	
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					

RECEIVED
JAN 22 2002
TC 1700

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
HW	AM 882 813	12/98	EPO	—	—		
	AN						
	AO						
	AP						
	AQ						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

HW	AR	Mukai, T. et al, "Dynamic Mechanical Properties of a Near-Nano Aluminum Alloy Processed by Equal-Channel-Angular-Extrusion",
		Nano-Structured Materials, Vol. 10, No. 5, pp. 755-765 (1998) Elsevier Science Ltd.
HW	AS	Hatch, J.E., <u>ALUMINUM</u> , 1984, Chap. 5, "Metallurgy of Heat Treatment and General Principles of Precipitation Hardening", pp. 134-157, 175-183.
HW	AT	Ferrasse, S. et al., "Development of a Submicrometer-Grained Microstructure in Aluminum 6061 Using Equal Channel Angular Extrusion", J. Mater. Res. Vol. 12, No. 5, May 1997, pp. 1253-1261.

EXAMINER

Kang S. Wilkin III

DATE CONSIDERED

2/26/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 30-5004(4015)		SERIAL NO. 09/465,492	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Vladimir Segal et al.	
FILING DATE December 16, 1999				GROUP 1742	

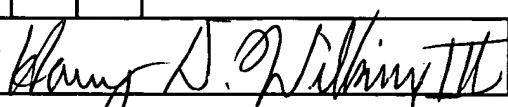
U.S. PATENT DOCUMENTS							
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
HW	AA	6,193,821	02/01	Zhang			
HW	AB	6,348,113 B1	02/02	Michaluk et al.			
HW	AC	6,085,966	07/00	Shimomuki et al.			
HW	AD	6,024,852	02/00	Tamura et al.			
HW	AE	5,798,005	08/98	Murata et al.			
HW	AF	5,231,306	07/93	Meikle et al.			
HW	AG						
HW	AH						
HW	AI						
HW	AJ						
	AK						
	AL						

FOREIGN PATENT DOCUMENTS						
Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No
HW	AM	08146201	07.06.1996	Japan		
HW	AN	10008244	13.01.1998	Japan		
HW	AO	WO 99/27150	03.06.1999	PCT		
HW	AP	WO 99/02743	21.01.1999	PCT		
HW	AQ	WO 01/29279 A1	26.04.2001	PCT		

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
HW	AR		Ferrasse, S. et al., "Microstructure and Properties of Copper and Aluminum Alloy 3003 Heavily Worked by Equal Channel Angular Extrusion", Metallurgical and Materials Transactions A, vol. 28A, April 1997, pp. 1047-1057.
HW	AS		Pavate et al., "Correlation between Aluminum alloy sputtering target metallurgical characteristics, Arc initiation, and In-film defect density", SPIE Vol. 3214, 1997, pp. 42-47.
	AT		

EXAMINER <i>Henry D. Wilkins</i>	DATE CONSIDERED <i>12/18/02</i>
----------------------------------	---------------------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 30-5004(4015) 33507	SERIAL NO. 09/465,492			
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center; margin-right: 10px;"> OIP APR 06 2001 PATENT & TRADEMARK OFFICE </div> <div> LIST OF ART CITED BY APPLICANT (Use several sheets if necessary) </div> </div>				APPLICANT Vladimir Segal et al.				
				FILING DATE December 16, 1999	GROUP 1742			
U.S. PATENT DOCUMENTS								
Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate		
	AA							
	AB							
	AC							
	AD							
	AE							
	AF							
	AG							
	AH							
	AI							
	AJ							
	AK							
	AL							
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
HW	AM	WO 00/31310	06/00	PCT				
	AN							
	AO							
	AP							
	AQ							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
	AR							
	AS							
	AT							
EXAMINER					DATE CONSIDERED			
					7/19/01			
<small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>								

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 30-5004(4015) 33507		SERIAL NO. 09/465,492			
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 2px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 1.2em;"> O I P E APR 06 2001 PATENT & TRADEMARK OFFICE </div> </div>				LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Vladimir Segal et al.	
				FILING DATE December 16, 1999		GROUP 1742			
U.S. PATENT DOCUMENTS									
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate			
HW	AA	SN 09/098,760 (as filed and amended)	Shah et al			6/17/08			
	AB								
	AC								
	AD								
	AE								
	AF								
	AG								
	AH								
	AI								
	AJ								
	AK								
	AL								

RECEIVED
 APR 11 2001
 TC 1700

FOREIGN PATENT DOCUMENTS							
	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	AM						
	AN						
	AO						
	AP						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
	AQ		
	AR		
	AS		

EXAMINER <i>Harry S. Wilkinson Jr</i>	DATE CONSIDERED <i>7/19/01</i>
--	-----------------------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO/D-49 <div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block; transform: rotate(-15deg);"> OIPE JCIT JUL 11 2001 PATENT & TRADEMARK OFFICE </div>		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 30-5004(4015) 33507		SERIAL NO. 09/465,492		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Vladimir Segal et al.		FILING DATE December 16, 1999		
				GROUP 1742				
U.S. PATENT DOCUMENTS								
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	AA							
	AB							
	AC							
	AD							
	AE							
	AF							
	AG							
	AH							
	AI							
	AJ							
	AK							
	AL							
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
HW	AM	WO 99/66100	12/1999	PCT				
HW	AN	WO 87/07650	12/1987	PCT				
	AO							
	AP							
	AQ							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
	AR		<div style="text-align: right; font-size: 2em; transform: rotate(-15deg); opacity: 0.5;"> RECEIVED JUL 17 2001 TC 1700 </div>					
	AS							
	AT							
EXAMINER		<i>Danny S. Wilkins, III</i>			DATE CONSIDERED <i>7/19/01</i>			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
30-5004(4015)SERIAL NO.
09/465,492LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Vladimir Segal et al.FILING DATE
December 16, 1999GROUP
1742

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
HW	AA	3,653,981	04-1972	Watanabe et al.	1	1	
HW	AB	3,849,212	11-1974	Thornburg	1	1	
HW	AC	5,766,380	06-1998	Lo et al.	1	1	
HW	AD	6,123,896	09-2000	Meeks, III et al.	1	1	
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

RECEIVED
SEP 27 2002
TC 1700

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
HW	AM	03-082773	04-1991	Japan	1	1		
HW	AN	08-134606	05-1996	Japan	1	1		
	AO							
	AP							
	AQ							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

HW	AR		Material Evaluation Report, Ingot No. T891C, 03/25/98, 1 page.
HW	AS		Canonico, "Stress-Relief Heat Treating of Steel", ASM Handbook Vol 4: Heat Treating ASM International, 1991, pages 33-34.
	AT		

EXAMINER

Barry D. Wilk

DATE CONSIDERED

12/18/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.